

Appl. No. 09/902,683

REMARKS/ARGUMENTS

Status of Claims

Claims 1-21 remain in the application.

35 U.S.C 101 Rejections

The Examiner has rejected claims 10-18 under 35 U.S.C. 101 as they are alleged to be "directed solely to a data format containing various data fields". The Examiner states that even though the update message is recited to be embodied in a transmission medium "it does not constitute functional descriptive material because it does not exhibit any functional interrelationship with the way computing processes are performed, but just comprises a format of a message".

According to Section 2106.IV.B.1 of the Manual of Patent Examining Procedure (MPEP), "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. The particular fields in the update message recited in independent claim 10 are not simply data being transported over the network, the fields have an affect on how information is transported over the network. For example, the VPN Reachability Mode indicates which model is being used by the VPNs relating to transmission of the Network Layer Reachability Information (NLRI). Therefore, the fields are part of a data structure, namely the update message, having an assigned functionality. Therefore, Applicant submits it is incorrect to characterize these features as "non-functional descriptive material" because the fields contain information that define how the nodes in the network operate in the form of performing computing processes in routing the update message.

35 U.S.C 103 Claim Rejections

The Examiner has rejected claims 1-21 under 35 U.S.C. 103(a) as being unpatentable over Rekhter (U.S. Patent No. 6,526,056).

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The Examiner alleges that Rekhter discloses many of the features recited in claim 1, except that Rekhter does not explicitly disclose that the updated message further comprises a VPN Reachability mode field and Tunnel Mechanism information. The Examiner states that "these differences are only found in non-functional descriptive material and are not functionally involved in the steps recited" and further states that "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed". Applicant brings to the attention of the Examiner that claim 1 is a device claim directed to a Border Gateway Protocol Speaker, not a method claim and that there are no steps per se recited in the claim.

An example of what the VPN Reachability Mode may be is described at page 10, lines 20-30, which states: "The VPN Reachability Mode field 120 indicates whether a piggybacking model or a VR model is being used by the VPNs to which the NLRI relates, and is one octet in length". Rekhter does not specifically disclose multiple VPN models having different models, for example the Virtual Router (VR) model and the piggyback model that are utilized by the network and that the VPN model being utilized is to be identified in the update message.

As can be found in the description of the present application at page 10, lines 4-22, "a tunnel allows opaque transport of VPN packets across the backbone, such that packet forwarding within the backbone is independent of VPN address fields within the packet". An example of what is meant as Tunnel Mechanism information is "a Length of VPN Tunnel Entries field 135 and zero or more VPN Tunnel Entry fields 140. Each VPN Tunnel Entry field has a format as shown in FIG. 3C, and includes a Tunnel Type field 165, a Length field 170, and a Tunnel Value field 175. The Tunnel Type field 165 indicates a type of tunnelling mechanism, and is two octets in length. The Length field 170 indicates a length of the Tunnel Value field in bits, and is one octet in length. The Tunnel Value field 175 carries information related to an endpoint of the tunnel, and has a variable length. The Tunnel Value field 175 can carry, for example, address information, Quality of Service information, and tunnel mechanism parameters".

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The Examiner states that "transmitting the update message would have been performed regardless of the different fields" recited in claim 1. As the contents of the update message, specifically the VPN Reachability Mode field and the Tunnel Mechanism information affect how the update message is transmitted in the network, Applicant submits it is incorrect to identify these features as "non-functional descriptive material". As discussed above, Section 2106.IV.B.1 of MPEP states "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. The fields of the update message are not simply data being transported over the network, but fields that are used in determining how the update message is to be transported over the network. Therefore, the fields are part of a data structure, the update message, having an assigned functionality.

Applicant submits that Rekhter does not disclose all the features recited in current claim 1, in particular the VPN Reachability mode field and Tunnel Mechanism information in the update message transmitted by the Border Gateway Protocol Speaker, as conceded by the Examiner. For this reason and at least the other reasons discussed above Applicant submits that claim 1 as presently recited does patentably distinguish over the subject matter disclosed by Rekhter. Applicant respectfully requests that for at least the above reasons the Examiner reconsider and withdraw the 35 U.S.C 103 claim rejection to claim 1.

Claims 2-9 are dependent either directly or indirectly on claim 1. The Examiner uses the same reasoning that "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed" in objecting to claims 2-9, while conceding that Rekhter does not disclose particular features of each claim. Claims 2-9 are allowable for at least the same reasons as claim 1 that are discussed above as well as the fact that Rekhter does not disclose all the limitations of the respective dependent claims, as conceded by the Examiner.

Independent claim 10 is directed to "a data format embodied in a transmission medium" and is similar in subject matter to independent claim 1. Applicant submits that independent claim 10 and dependent claims 11-18 are allowable for at least the same reasons discussed above with regard to claim 1.

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Similarly, Applicant submits that independent claim 19 and dependent claims 20 and 21 that are directed to "a virtual router" are allowable for at least the same reasons discussed above with regard to claim 1.

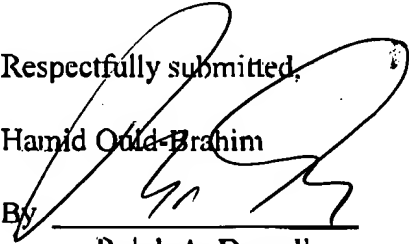
Applicant respectfully requests that for at least the above reasons the Examiner reconsider and withdraw the 35 U.S.C 103 claim rejection to claims 2-21.

In view of the forgoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

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Date: June 21, 2006
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